

How Pennsylvania's Economy Benefits from International Trade & Investment



Overview

With more than 95 percent of the world's population and 80 percent of the world's purchasing power outside the United States, future economic growth and jobs for Pennsylvania and America increasingly depend on expanding U.S. trade and investment opportunities in the global marketplace.

The following pages feature key facts and figures drawn from new Business Roundtable research, U.S. government data, and other data sources that demonstrate the benefits of international trade and investment to economic growth and jobs in Pennsylvania.

Why is International Trade & Investment Important to Pennsylvania?

- **International trade, including exports and imports, supports 1,398,000 Pennsylvania jobs – nearly one in five.** These trade-related jobs grew 5.7 times faster than total employment from 1992 to 2016 and are at large and small companies, on farms, in factories, and at the headquarters of Pennsylvania's globally engaged firms. *(See Pennsylvania Jobs Depend On Two-Way Trade)*
- **Pennsylvania exported \$36.5 billion in goods and \$21.6 billion in services in 2016,** including pharmaceuticals & medicines, basic chemicals, aerospace products & parts and travel services. Of Pennsylvania's 15,023 exporters, 89 percent are small- and medium-sized companies with less than 500 workers. *(See Pennsylvania Businesses Grow With Exports)*
- **Customers in 212 countries and territories buy Pennsylvania-made goods and services,** including billions of dollars in annual exports to top markets like Canada, Mexico and China. Pennsylvania's goods exports have grown more than 50 percent faster than state GDP since 2006. *(See Pennsylvania Companies Export Throughout The World)*
- **Imports lower prices and increase choices for Pennsylvania companies and families.** Lower raw material and input costs help Pennsylvania companies stay competitive in global markets, while families can stretch paychecks further as trade agreements reduce the cost of products by eliminating costly barriers to trade. *(See Pennsylvania Companies And Workers Use Imports To Compete)*
- **Free trade agreements (FTAs) have helped fuel rapid export growth from Pennsylvania to partner countries.** In 2016, \$17 billion of Pennsylvania's goods exports, or 47 percent, went to FTA partners. This represents an increase of 29 percent since 2006. *(See Pennsylvania Needs Trade Agreements To Grow)*
- **Foreign-owned companies invest and build facilities and employ 300,800 workers in Pennsylvania.** *(See Foreign Investment In Pennsylvania Creates Jobs)*



Pennsylvania Jobs Depend on Two-Way Trade

Overview

Creating and preserving quality U.S. jobs is a goal shared by all Americans. With more than 95 percent of the world’s population and 80 percent of the world’s purchasing power outside of the United States, future American economic growth and job creation depend on open markets abroad.

Trade Creates & Supports Jobs in Pennsylvania

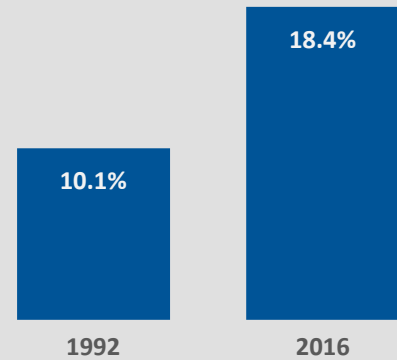
- Export growth increases jobs by generating new business for Pennsylvania's manufacturers, service providers and farmers. Imports support jobs and keep costs low, helping Pennsylvania businesses compete and saving Pennsylvania families real dollars at the cash register.
- Nearly one in five Pennsylvania jobs depends upon international trade.
- Pennsylvania's trade-related employment grew 5.7 times faster than total employment from 1992 to 2016.
- Jobs in export-dependent industries pay about 16 percent more than jobs in less export-intensive industries.
- U.S. exporting plants increase employment 2 to 4 percent faster annually than plants that do not export. Exporting plants also are less likely to go out of business.
- Trade-supported jobs are not just at companies that export and import. Trade supports higher wages for workers and lower costs for companies and consumers, providing them with more money to spend on other things. This spending supports additional jobs throughout the U.S. economy in sectors like entertainment, education and construction.

By the Numbers

1,398,000

Number of Jobs in Pennsylvania Supported by Trade

Share of Jobs Tied to Trade Increased 82 percent from 1992 to 2016



Jobs Tied to Trade Top Sectors, 2016

Trade & Distribution	287,500
Professional, Scientific, Tech. Services	222,300
Personal & Recreational Services	140,600
Manufacturing	76,300
Finance, Insurance	68,900



Pennsylvania Businesses Grow with Exports

Overview

Pennsylvania exported an estimated \$36.5 billion in goods and \$21.6 billion in services in 2016. Between 2006 and 2016, Pennsylvania goods exports have increased by 39 percent and services exports by 89 percent. Large companies now account for 69 percent of the value of Pennsylvania's goods exports, with the rest provided by small- and medium-sized enterprises (SMEs).

Small & Large Employers Partner to Export

In addition to exporting directly themselves, thousands of American SMEs export indirectly when they sell goods and services to large U.S. exporters. Based on their direct and indirect export activity combined, SMEs represent more than 40 percent of the value of U.S. exports.

Top Pennsylvania Exports

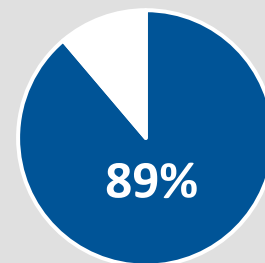
- Pennsylvania ranks among the top 5 state exporters in 22 industries, including first in sugar & confectionery products (\$642 million), first in products from purchased steel (\$79 million), first in foundry products (\$131 million), and first in miscellaneous transportation equipment (\$645 million).
- Pennsylvania is America's 27th largest exporter of agricultural products. It is the third largest exporter of greenhouse & nursery products, the 10th largest exporter of poultry & eggs, the 10th largest exporter of aquaculture, and the 11th largest exporter of miscellaneous animal products.
- One of Pennsylvania's fastest growing export categories is beverages, which have increased by 26 percent per year since 2006. In 2016, exports of these products reached \$75 million.

By the Numbers

15,023

Number of Pennsylvania Businesses that Exported in 2015

Share of Pennsylvania Exporters that are Small- & Medium-Sized Businesses



Top Pennsylvania Exports, 2016

Goods

Pharmaceuticals & Medicines	\$3.1 billion
Basic Chemicals	\$2.3 billion
Aerospace Products & Parts	\$1.7 billion
Misc. General Purpose Machinery	\$1.4 billion
Navigational & Meas. Instruments	\$1.3 billion

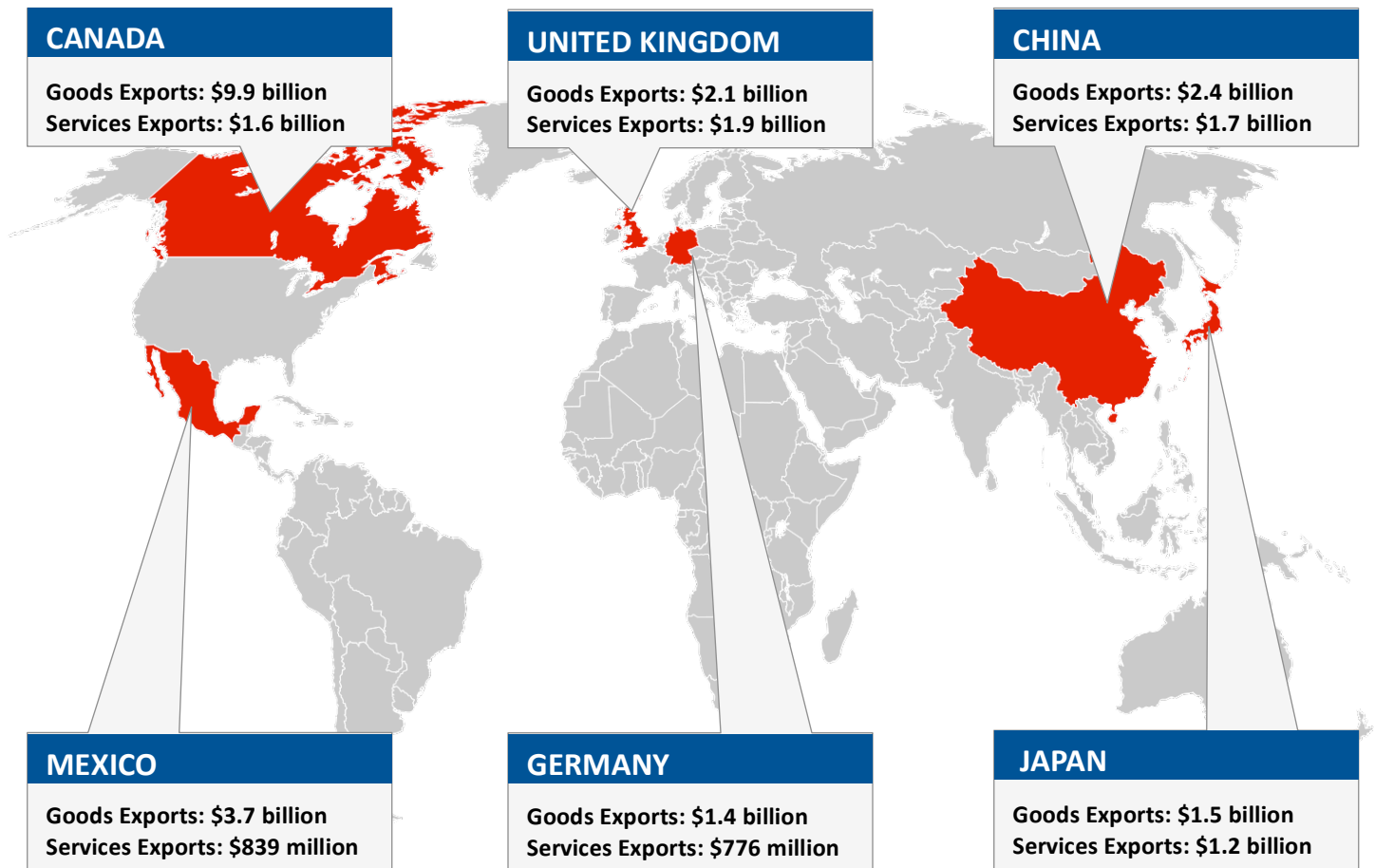
Services

Travel	\$4.2 billion
Mgmt. & Advisory Services	\$3.3 billion
Education	\$2.0 billion



Pennsylvania Companies Export throughout the World

In 2016, Pennsylvania companies sold their products in 212 countries and territories.
Top export markets include:



Fast Facts: How Exports Help the Pennsylvania Economy Grow

- Goods and services exports accounted for 8.1 percent of Pennsylvania's state GDP in 2016.
- Pennsylvania's exports have grown more than 50 percent faster than state GDP since 2006. The average annual export growth during this period was 5.0 percent, while the average annual state GDP growth was 3.2 percent.
- Pennsylvania's top export markets for goods are Canada, Mexico, and China. Its top market for services is the United Kingdom.
- Pennsylvania's goods exports to Turkey have grown by 20 percent per year since 2006, while Pennsylvania's services exports to Argentina have grown by 19 percent per year.



Pennsylvania Companies & Workers Use Imports to Make Products and Compete in International Markets

Overview

In 2016, 56 percent (\$1.2 trillion) of the products imported into the United States were inputs and components used by American producers. Lower cost inputs keep U.S. manufacturing competitive in international markets. Imports frequently contain components (like cotton or semiconductors) and services inputs (like design) provided by U.S. companies and farmers, including companies and farmers in Pennsylvania.

- Services, especially transportation from Pennsylvania's ports, finance and insurance, marketing and legal services are needed to bring imported goods to American manufacturers and households.
- In 2015, about 75 percent of identified U.S. importers were very small businesses with less than 20 employees.
- Trade and investment liberalization policies save the average Pennsylvania family of four more than \$10,000 per year.
- Imports help keep prices down for Pennsylvania families while increasing their choices for goods and services. Prices for imported consumer goods tend to drop year after year.

In 2015, about 197,000 U.S. companies (including 10,456 in Pennsylvania) imported products...

And roughly three-quarters of U.S. importers were very small businesses with less than 20 employees.

Imports Decrease Prices



-87.9%

Decrease in the Price of Televisions Between 2006 and 2016.



-63.3%

Decrease in the Price of Computers Between 2006 and 2016.



-44.7%

Decrease in the Price of Toys Between 2006 and 2016.

Imports Increase Choices



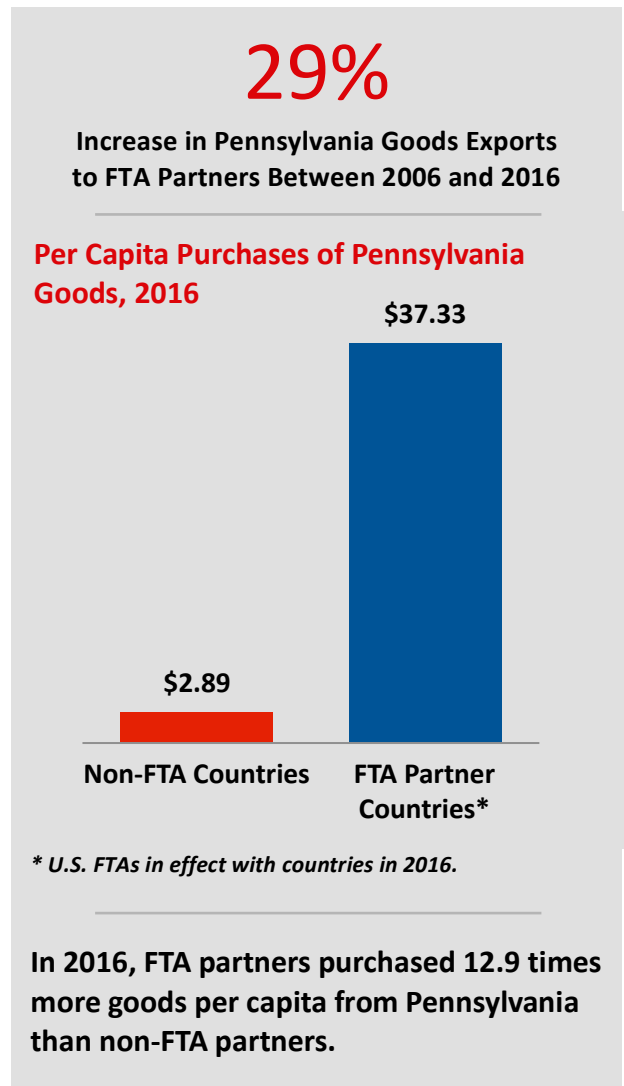
Pennsylvania Needs Trade Agreements to Grow

Overview

The United States has some of the lowest trade barriers in the world. Overall U.S. trade with our free trade agreement (FTA) partner countries supports millions of American jobs. Trade agreements level the playing field by lowering other nations' trade barriers, opening up foreign markets to U.S. exports and setting strong, enforceable rules for trade between the United States and those other countries. Pennsylvania has increased its exports to FTA partners following implementation of the U.S. FTAs with those countries.

- In 2016, \$17 billion of Pennsylvania's goods exports, or 47 percent, went to FTA partners.
- Since 2006, Pennsylvania's goods exports to countries with FTAs in effect with the United States in 2016 have increased by 29 percent.
- Pennsylvania's exports to Canada and Mexico have increased by \$9.4 billion (221 percent) since NAFTA went into effect in 1994.
- Pennsylvania's exports to Morocco have increased by 631 percent since the FTA with Morocco took effect in 2005.
- Pennsylvania's exports to Korea of aerospace products & parts have increased from \$9.8 million to \$170 million since the FTA with Korea went into effect in 2012.
- Mexico bought 43 percent of Pennsylvania's exports of railroad rolling stock in 2016.
- In 2016, \$5.0 billion of Pennsylvania's services exports, or 23 percent, went to FTA partners.
- Pennsylvania's exports to Singapore of R&D & testing services have increased from \$9.4 million to \$190 million, or by over 1,927 percent, since 2006 (earliest year available).

By the Numbers





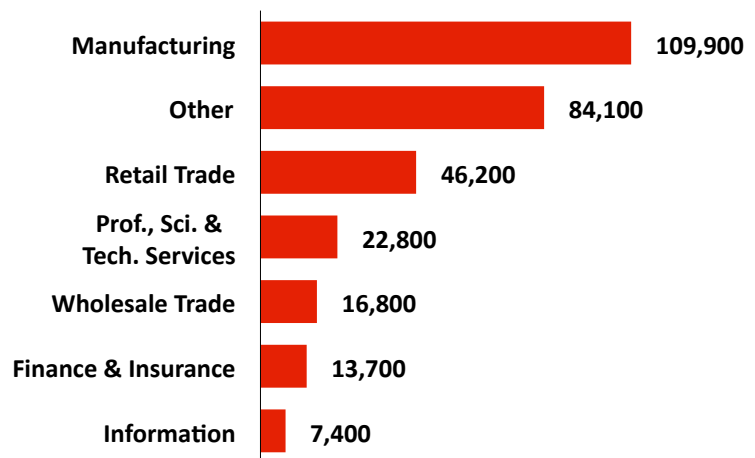
Foreign Investment in Pennsylvania Creates Jobs

Overview

Foreign-owned companies invest significant amounts of capital to open or expand facilities in Pennsylvania every year. Foreign-owned companies from around the world employed hundreds of thousands of workers in Pennsylvania, including:

- 50,800 workers employed by companies based in the United Kingdom;
- 42,600 workers employed by companies based in the Netherlands;
- 39,500 workers employed by companies based in Germany;
- 27,000 workers employed by companies based in France;
- 23,900 workers employed by companies based in Japan.

Foreign-Owned Companies Employed 300,800 Pennsylvania Workers Across Many Industries, 2015



Selected Foreign-Owned Companies Employing Workers in Pennsylvania

Company	Industry	Country
ABB Inc.	Power Distribution Services	Switzerland
Akzo Nobel Coatings Inc.	Chemicals Manufacturing	Netherlands
Arcelormittal USA	Steel Manufacturing	Luxembourg
BAE Systems Inc.	Defense/Security/Aerospace Services	United Kingdom
Domtar Paper Company LLC	Paper Manufacturing	Canada
Giant Food Stores, Inc.	Retailing	Netherlands
Lanxess Corp.	Plastic and Rubber Manufacturing	Germany
Mott Macdonald	Engineering Services	United Kingdom
SAP America Inc.	Software Development	Germany
Siemens Energy & Automation	Electronics and Engineering Services	Germany
UBS Financial Services	Financial Services	Switzerland



PENNSYLVANIA JOBS DEPEND ON TWO-WAY TRADE

Jobs-Tied-to-Trade: Baughman and Francois, "Terminating NAFTA: The National and State-by-State Impacts on Jobs, Exports and Output" (2018) (<http://businessroundtable.org/media/news-releases/new-study-withdrawal-nafta-would-jeopardize-american-jobs-and-hurt-u.s.-economy>)

Exporting Firm Wages: Riker, "Export-Intensive Industries Pay More on Average: An Update" (2015) (<https://www.usitc.gov/publications/332/ec201504a.pdf>)

Exporting Firm Growth: Bernard and Jensen, "Exporting and Productivity in the USA" (2004) (<http://faculty.tuck.dartmouth.edu/images/uploads/faculty/andrew-bernard/exprod.pdf>)

PENNSYLVANIA BUSINESSES GROW WITH EXPORTS

Small and Large Firms Partnering to Export (for 2007, the most recent year for which data were available): U.S. International Trade Commission, *Small and Medium-Sized Enterprises: Characteristics and Performance*, November 2010, (<http://www.usitc.gov/publications/332/pub4189.pdf>)

Exports, Rankings, and Trends: The Trade Partnership, derived from U.S. Census Bureau ("Census") data (<http://tradepartnership.com/data/cdxports-and-cdxjobs>)

Exporting Company Information: Census, "A Profile of U.S. Importing and Exporting Companies, 2014 – 2015" (<https://www.census.gov/foreign-trade/Press-Release/edb/2015/>)

PENNSYLVANIA COMPANIES EXPORT THROUGHOUT THE WORLD

Exports, Rankings, and Trends: The Trade Partnership (<http://tradepartnership.com/data/cdxports-and-cdxjobs>)

Export vs. GDP Growth: Derived from Census export data and U.S. Bureau of Economic Analysis (BEA) "GDP by State" database (<http://bea.gov/regional/index.htm>)

PENNSYLVANIA COMPANIES & WORKERS USE IMPORTS TO COMPETE IN INTERNATIONAL MARKETS

Importing Company Information: Census, "A Profile of U.S. Importing and Exporting Companies, 2014 – 2015" (<https://www.census.gov/foreign-trade/Press-Release/edb/2015/>)

Imports as Components: Derived from Census end-use import data

Savings from Liberalization: Bradford, Grieco, and Hufbauer, "The Payoff to America from Global Integration" (2005) (<http://www.piie.com/publications/papers/2iie3802.pdf>)

Price Changes: Derived from BLS Consumer Price Index database (<http://www.bls.gov/cpi/>)

PENNSYLVANIA NEEDS TRADE AGREEMENTS TO GROW

Exports and Trends: The Trade Partnership (<http://tradepartnership.com/data/cdxports-and-cdxjobs>)

Per Capita Purchases of Pennsylvania Goods: Derived from The Trade Partnership (<http://tradepartnership.com/data/cdxports-and-cdxjobs>) and World Bank population estimates

FOREIGN INVESTMENT IN PENNSYLVANIA CREATES JOBS

Employment Data: BEA "Direct Investment & Multinational Companies" database (http://bea.gov/iTable/index_MNC.cfm)

Foreign Investors: Uniworld BP database of "Foreign Firms Operating in the United States" (<http://www.uniworldbp.com>)